DOCUMENT RESUME

ED 145 797 HE 009 393

AUTHOR Baskin, Samuel
TITLE Quest for Quality. Some Models and Means. New Dimensions in Higher Education. Number 7. RMQ66000=Office of Education (DHEW), Washington, D.C.
REPORT NO OE-50016
PUB DATE 66
NOTE 23p.; Originally published 1960 ; Parts are marginally legible due to type size

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *College Instruction; *Educational Alternatives; Educational Improvement; *Educational Quality; *Experimental Colleges; Higher Education; *Independent Study; Individualized Programs; Instructional Innovation; *Models; Private Colleges; Program Descriptions

ABSTRACT

Research designed to compare the effectiveness of independent study and the more traditional methods of college instruction as they are related to student learning is summarized in the report. Some of the new curriculum patterns inaugurated to improve instruction are described. Several experimental programs are discussed in sufficient detail to reveal their purposes and potential, in terms of both the quality of the student's education and economy in the use of college teaching resources. Programs in independent study at Oberlin College, Antioch College, and Vanderbilt University are reviewed. Proposals for the establishment of new programs also are described, including those at Monteith College, Goddard College, Bard College, Wesleyan University, and a New College Plan co-sponsored by the colleges of Amherst, Smith, Mount Holyoke, and the University of Massachusetts. The rationale for this experimentation is discussed briefly along with the need for significant evaluation. (LBH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED145797

OE-50016

NEW DIMENSIONS in Higher Education

Number 7

Quest for Quality

Some Models and Means

by
SAMUEL BASKIN

WINSLOW R. HATCH, *Editor*
Clearinghouse of Studies on Higher Education
Division of Higher Education

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

HE 009393

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
ABRAHAM RIBICOFF, *Secretary*

Office of Education
STERLING M. MCMURRIN,

Printed 1960
Reprinted 1962
Reprinted 1966

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON . 1966

FOREWORD

THE TASK of providing quality education for an increasing number of students may yet turn out to be of value to higher education. The pressure of enrollments may impel institutions to examine critically some of their long and uncritically held assumptions about the nature and organization of the teaching-learning process. They may be encouraged to try out new methods and new programs designed to improve both what the student learns and the way he learns it.

This report, the seventh in the series of studies on "New Dimensions in Higher Education," summarizes research designed to compare the effectiveness of independent study and the more traditional methods of college instruction as they are related to student learning; and it describes some of the new curriculum patterns which are being inaugurated to improve instruction. A number of experimental programs are described in sufficient detail to give interested readers a view of the purposes and potentialities of these programs, both in terms of the quality of the student's education and in terms of economy in the use of college teaching resources. It is hoped that this report will be useful to college administrators, faculty, and board members as they seek to improve the quality of education within their own institutions.

The U.S. Office of Education wishes to express its appreciation to Dr. Samuel Baskin of Antioch College, who prepared this report. His position as director of Antioch's program of educational research has kept him in close touch not only with his own institution's adventures in higher education but with the experimentation of many other colleges and universities as well.

Our thanks also go to the officers of the Fund for the Advancement of Education and to the Carnegie Corporation for making their files available in the preparation of this report, and to Chester L. Neudling and Lanora G. Lewis, of the Office of Education, for editorial assistance in the preparation of the manuscript.

HOMER D. BABBIDGE, JR.
Assistant Commissioner
for Higher Education

HAROLD A. HASWELL,
Director, Programs Branch
Division of Higher Education

CONTENTS

	Page
Foreword	III
I. Introduction	1
II. Putting the Student on His Mettle: The New Programs in Independent Study	1
III. Working from the Ground Up: Proposals for the Establishment of New Programs in Higher Education	9
IV. Conclusion	17

QUEST FOR QUALITY

I. Introduction

EDUCATORS who have had more than their share of anxious moments in recent years as they have read reports of the impending flood of college students are now beginning to wonder whether the panic, or at least near panic, wasn't a good thing after all. For today, many colleges and universities, pressed by a new concern for achieving quality in the face of increasing numbers of students, have begun to examine critically some of their long held assumptions as to the nature and organization of the teaching and learning process. It is an examination that has brought with it a new surge of experimentation and a new series of developments in higher education.

The report presented here attempts to describe some of these newer developments. It presents first a review of the new programs in independent study (in which independent study is viewed as a way of learning for all students and not as a special opportunity for abler students only); and it moves from this description of the independent study program to an overview of some of the newer experimental college programs.

It has not been possible within the confines of this report to review each of the developments that have come to the attention of the Office of Education. The report is not intended as a study in depth of the many projects presently under way, nor is it intended as a formula for achieving quality and quantity in higher education.

This is an "idea" paper. It is primarily descriptive in nature and seeks to present program directions and developments. The intent in the selection of particular programs for review is to illustrate the nature of such programs and to convey something of the potential these newer ideas may hold for higher education in the years ahead.

II. Putting the Student on His Mettle: The New Programs in Independent Study

"Nothing seems to surprise foreign educators so much," Clarence Faust, President of the Fund for the Advancement of Education, has

commented, "as our insistence upon the routine of courses in higher education."[1] He reports one visitor as saying, "You seem to treat college students just as they had been treated in high school and indeed as they had been treated in grade school. At what point do you begin to expect the acquisition of intellectual maturity on the part of the students?"

Educators have long bemoaned our practice of "spoon feeding" college students. We operate by and large on the theory that learning can take place only when students attend classes for a certain number of hours and over a certain number of weeks. Education comes in "packages"—it may be a 3-credit package where the student's presence may be expected in regularly scheduled class sessions over a period of 12, 13, or 15 weeks; or it may be a 5-credit package, with the student expected to be in attendance for at least 60 hours of regularly scheduled class time. But regardless of the size of the package, credit for learning (and learning itself) is assumed to bear a close relationship to the frequency with which the student sits in the classroom. The accumulation of a total of 120 or so of such credits signifies that the student has "learned" and has thereupon become eligible for the bachelor's degree.

A review of recent developments in higher education offers good evidence that many colleges and universities are beginning to do more than challenge this "packaging theory of learning." A May 1959 report of the Fund for the Advancement of Education lists 16 institutions which, since 1956, have been experimenting with the use of new programs of independent study as part of their regular teaching procedures. These institutions include Antioch College, Carleton College, the University of Colorado, Duke University, Goddard College, Grinnell College, Marquette University, the University of Michigan, Morgan State College, the Woman's College of the University of North Carolina, Oberlin College, the University of Omaha, Pennsylvania State University, Rutgers University, Vanderbilt University, and the State College of Washington.[2] Several of these studies are noted in the material which follows, and three of these programs, those of Oberlin, Antioch, and Vanderbilt University, are reviewed in somewhat more detail. The material has been prepared to illustrate the nature of these programs and the implications they may have for the problems of quality and the better utilization of college teaching resources.

[1] Clarence Faust, "The Years Ahead in Higher Education," in *Transactions of the Ohio College Association*, Columbus, Ohio, The State University, April 1957.

[2] *Better Utilization of College Teaching Resources*, a report by the Committee on Utilization of College Teaching Resources, New York, The Fund for the Advancement of Education, May 1959.

First, a word on definition. There is, of course, nothing new in the proposition that colleges might employ independent study as a way of helping students enrich and accelerate their programs. In *Independent Study in the United States*, Bonthius, Davis, and Drushal report on a number of such programs.[3] These programs, however, have long been held to be the special prerogative of the superior student. What is new in the recent experimentation is the use of independent study as part of the teacher's regular classroom procedures and its employment with all students within a particular course. Independent study is defined, within the context of these experiments, as independent work or reading, sometimes on one's own, sometimes in small groups, but with such work taking place in the absence of the teacher and *in lieu* of certain regularly scheduled class meetings.

The nature of the experimentation on independent study varies from its use in a single course in American history, as was the case at the University of Omaha, to its employment in 15 courses in the physical sciences, social sciences, and the humanities (Antioch); from the use of individual or "lone wolf" methods of independent study (Morgan State College, Carleton College, Vanderbilt University, and the State College of Washington) to the use of team and small group approaches to learning independently (Antioch, Oberlin, and Pennsylvania State University); and from the use of independent study arrangements in which students were expected to work independently over a substantial block of time with no formal classroom contact with the instructor (Carleton, Oberlin, and the University of Michigan) to arrangements under which students met in regularly scheduled class sessions throughout the course, but where the number of such weekly meetings had been reduced (Grinnell, Marquette, and the Woman's College of the University of North Carolina). In all instances students were expected to work independently for at least a certain portion of the term, and in all cases the procedures were applied to all students in the particular course under study.

Oberlin College designed a study to test the hypothesis that students participating in freshman level courses in mathematics, zoology, and psychology, and working independently of their instructors for one-third of their regularly scheduled class time would learn as well as a comparable group of students who met their instructor for the usual number of regularly scheduled class meetings. Its objective was two-fold: (a) to see whether students could be helped to take a greater share of responsibility for their own learning (and thus improve the quality of their educational experience), and (b) to see whether, by

[3] Bonthius, Davis, and Drushal and collaborators, *Independent Study in the United States*, New York, Columbia University Press, 1957.

629896 O-62-2

this arrangement, the college might be able to make important economies in the use of its instructional time.

Experimental and control groups were set up for each of the courses under study, with groups matched on certain variables deemed relevant to the purposes of the experiment (scholastic aptitude and course knowledge at the time of taking the course). Both experimental and control groups were held responsible for the same course objectives, studied the same subject matter, and took common examinations, with the principal difference being in the amount of time spent in the classroom with their instructors.

"As far as conventional measures of course performance go," the Oberlin experimenters report, "the experimental and control groups appear to have learned equally well."[4] No significant differences in learning were found between those taking a course by the usual lecture-discussion method of instruction and those taking the course by the experimental procedures (averaging one-third less class contact time with the instructor). The results held true for each of the courses under study; they held true when different measures of learning (content examinations, thought questions, and essay examinations) were employed, and they held true when individuals at various levels of academic ability were compared. In only one instance did the results begin to approach significance. This one case was in the course in mathematics where a difference which could be expected to occur by chance only 13 times in 100 was found in favor of the experimental group. This difference was on a test of "learning resourcefulness" which was designed to measure student ability to handle problem situations not covered in the course itself.[5]

While each of the instructors reduced his class-contact hours by at least one-third when teaching by the experimental method, the analysis of the data regarding "the more efficient use of instructional resources" needs to be viewed from more than just this perspective of actual time spent in class by instructors. For the new methods posed other kinds of time demands on the instructor in the planning and organization of the new teaching conditions, and in the preparation of syllabi, study guides, special reading lists, and other materials to be used by the independent study groups. Taking note of these factors, the Oberlin study reports some, but no substantial, savings in time during this first year of its experimentation. The experimenters expect, however, that considerable savings in time would occur once instructors had developed a backlog of experiences in teaching by these newer methods.

[4] "Report on Independent Studies Experiment at Oberlin College," Oberlin, Ohio, 1957–58, p. 14.
[5] *Ibid.*, p. 11.

The Oberlin researchers suggest several directions for further research, chief of which is the relationship of various attitudinal and personality factors to student achievement in learning. While suggesting that these factors may hold particular relevance for future experimentation in independent study, the report notes that

> • • • there is nothing in the present data to suggest that normal progress of college level students is interrupted or interfered with by an independent studies procedure. • • • The methods of instruction reported here ought to work reasonably well in most college situations.[6]

Antioch College is now in its fourth year of experimentation with independent study. It has employed a variety of approaches to independent study in its use of periods of independent reading, individual study, team and small group methods, and combinations of individual and small group procedures in independent work.

Five courses were included in Antioch's first year's experiment (a course in English literature, a course in American history and civilization, a course in the history of Western art, and an introductory and an advanced course in sociology). Eight courses were included in the study of 1957–58 (two courses in the physical sciences, an introductory course in geology, a course in American government and politics, a course in anthropology, a course in present-day religion, a course in reflective thinking, and one in the history of Western art course). A comparable number of courses were included in the 1958–59 study, and several additional courses in psychology, business administration, and history were added to the study for 1959–60.

Experimental and control groups were set up for all but three courses under study, with the same instructor teaching both the experimental and control sections and with both groups matched on a number of variables including general intelligence, age, sex, year in college, and background information at the time of taking the course. Both experimental and control groups were to cover the same course material and were held responsible for the same course objectives as outlined in previously prepared syllabus material. The principal difference between the groups was in the use of the independent study procedures with the members of the experimental groups, and in the reduction of class-contact time of these groups by amounts ranging from 30 to 60 percent. Thus the members of the experimental courses averaged 20 to 30, and in some instances 40, fewer contact hours with the instructor than did the students who were taking the course by the lecture-discussion method of instruction and meeting regularly with the instructor. Achievement of course objectives was measured in a variety of ways, including multiple choice and other kinds of

[6] *Ibid.*, pp. 22, 24.

content-learning examinations, laboratory and special task assignments, essays, and tests of judgment and critical thinking.

Commenting on the results of their first year's study, the Antioch research team has this to say:

> Pages of data relating to differences in anticipatory gains, direct gains, accumulated gains, and over-all gains can be summarized very briefly by saying simply that there is no evidence that would lead us to reject the null hypotheses. Differences in control and experimental groups reflecting different treatments * * * are by and large insignificant * * *.[7]

The Antioch experimenters report similar results for their studies of 1957–58 and 1958–59. "No pattern emerges," reads their report for 1957–58, "favoring any teaching procedure [lecture-discussion or independent work] as the way to help the student gain more or produce work of a higher quality." [8]

While noting some savings in instructional time, the Antioch report, as was the case at Oberlin, calls attention to the new time demands posed by the experiment in organizing and preparing for the autonomous study methods: "Teaching is apparently like an iceberg—the major part of the work, preparation, and evaluation takes place away from the classroom, invisible to the students." [9] There are indications, however, that some real time savings may accrue once the instructor has prepared the special materials for the independent study groups. The most striking example of this (although this case was the exception rather than the rule) was in the two philosophy courses included in the 1958–59 experiment, where the instructor "saved up to 57 percent of the total time which normal procedures would have required for the number of students enrolled." [10] In one of these instances, in a course in present-day religion, the instructor was able to teach 80 students by the experimental methods as well as a group of 20 students by the conventional method, using only *half* as many class contact hours with the group of 80.

Vanderbilt University undertook its research program in independent study during the summer of 1958. Although controls were employed in only 2 of 28 courses studied, the research is reviewed here on account of the spread of courses included in the experimentation, and because it represents one of the few instances in which a major block of courses was offered by the independent study method during any one time. While Antioch has done its experimentation in 15 courses, no more

[7] Ruth Churchill, "Preliminary Report on the Reading Plan Study," Yellow Springs, Ohio, Antioch College, Sept. 1957, p. 6.

[8] "Experiment in Independent Study," Yellow Springs, Ohio, Antioch College, Sept. 1958, p. 21.

[9] *Ibid*, p. 30.

[10] Morris Keeton, "An Experiment with Independent Study Methods in Philosophy," Yellow Springs, Ohio, Antioch College. (Paper presented at Western Conference on the Teaching of Philosophy, May 1959.)

than 6 or 7 of these were taught during any one term; in contrast, Vanderbilt's experiment involved a total of 21 faculty members from a summer faculty of 54. The schedules used in the independent studies programs, which included courses in accounting, English composition and grammar, German and Spanish literature, history, philosophy, political science, and psychology, reduced class time by 25 to 50 percent. Several kinds of programs were employed, with the most common one calling for "four 1-hour class sessions in alternating weeks with the remaining weeks devoted to independent study." [11]

While calling attention to the limitations of their data, in that most of the analyses involved gross comparisons with classes of a previous fall or spring semester, the Vanderbilt investigators report:

> In sum, such evidence as is available supports the hypothesis that students of average or superior abilities perform as well and learn as much on reduced schedules as on standard * * *. It is fairly clear that most students believe it to have had a beneficial effect on their habits of independent study. A majority estimated that at worst they had not learned less than they were accustomed to under conventional arrangements, and fragmentary evidence of an objective character does not prove them wrong.[12]

Commenting on the question of better use of instructional time, the report notes:

> With three exceptions, it was reported that the schedules in use permitted more research, writing, or other professional activity than would have been possible on standard schedules * * *. For most faculty members * * * there appeared to be a net gain in hours. At least as important as this economy was the fact that the reduced schedules adapted especially well to efficient usage of available time: long periods could be reserved *en bloc* for research and writing. In this respect, the most beneficial schedule was the one which arranged all meetings in alternate weeks.[13]

The foregoing studies review in only partial detail 3 of the 16 researches on independent study noted in the report of The Fund for the Advancement of Education. In summarizing this whole grouping of studies, the report states:

> Almost without exception, the customary academic examinations showed that students in the independent study experiments learned at least as much as the students who had regular class work. Rarely were there statistically significant differences in the performance of the experimental and the control groups on regular or special examination.[14]

The report also indicates that while students at first expressed dissatisfaction with these methods of instruction in that they felt they

---

[11] Letter, January 13, 1959, from Harvie Branscomb, Chancellor, Vanderbilt University, to the Fund for the Advancement of Education.

[12] "A Report on the Vanderbilt University Experiment," Nashville, Tennessee, Vanderbilt University, summer 1958, p. 6.

[13] *Ibid.*, p. 5.

[14] *Better Utilization of College Teaching Resources, op. cit.*, p. 18.

were "missing something" because of the diminished contact with faculty members, student satisfactions grew as the year progressed, and several instructors reported that students who had experience with independent study through the entire year preferred it, while the control groups preferred the traditional method to which they were accustomed.

Commenting on the second of these questions raised by the studies, namely whether they may hold significant impact for colleges in the more effective utilization of their teaching resources, the report notes that

> • • • the results are more potential than realized. The experimental program naturally involved considerable extra work in the initial stages and, if preparation of syllabi and planning for independent work were taken into consideration, there would be few places which could report actual time saved in the first year of experimentation. Nevertheless, the omission of certain class meetings did result in [some] saving of time during the year • • •.[15]

There is still, of course, much that needs to be done before we can really begin to evaluate the full impact of these independent-study teaching procedures. For one thing, we do not know enough about how to teach by these newer methods, nor how we can best train students for working on their own. For another, we do not know enough, as the Oberlin and Michigan experimenters remind us, about student and instructor needs and personality patterns and what role these factors may play in the teaching-learning process. And we do not know enough about our measures of independence (although the Antioch and Oberlin experiments have made some moves in this direction through their use of "learning resourcefulness" instruments) so that we might be able to determine better the degree to which these studies really contribute to the development of student initiative and independence in learning.

The research on teaching effectiveness reminds us that we have yet to arrive at a *formula* for good teaching. Teachers teach well by many different methods. Elements of course content, background, group make-up, and instructor as well as student satisfactions bear significantly on this question of how to teach.[16] The new programs in independent study are not intended as a panacea for higher education, nor are they intended as a glorified "do-it-yourself plan" which works by simply turning the student loose on his own. Quite the contrary—the instructor's job may be different but it is no less difficult. The teacher who employes these independent study procedures has a critical

[15] *Ibid.*, p. 19.

[16] For a summary of the research on teaching effectiveness, see the second issue of this series, *Effectiveness of Teaching*, by Winslow R. Hatch and Ann Bennett; and Philip Jacobs, *Changing Values in College*, New Haven, Conn., The Edward W. Hazen Foundation, Dec. 1956.

role to play in selecting and structuring learning experiences so that the maximum effect is achieved and the student's own resources for learning are used to the fullest.

The question is not whether the teacher should be eliminated from the teaching process, but rather: *To what kinds of learning experiences should the student be exposed?* What combination of classroom time and independent work make for most effective learning? The data from the present experimentation in independent study seem clear on this point: Students are able to learn as well with much less class time than we have been accustomed to require of them. As a minimum, the evidence presses for a much closer examination of the "class hour formulae" by which we teach.

III. Working from the Ground Up: Proposals for the Establishment of New Programs in Higher Education

Addressing the Association for Higher Education, which had devoted its eleventh annual meeting to the "crisis of numbers" and the problems of quality in higher education, Harold Taylor had this to say:

> All the evidence that I have been able to collect indicates that if there were not a single student added to the present enrollment of American colleges and universities during the next ten years, we would have exactly the same need for scrapping our present system of instruction and inventing a new one * * *. What we have now is a huge mechanical system for disseminating information. Once the information is conveyed, it is checked and academic credits are awarded for accuracy in recording * * *. The present system is built on the assumption that learning occurs in one dimension—the dimension of memory. It assumes that the rewards of learning are not to be found in the pleasure and joy of the knowing or in the achievement of belief, not in finding a sense of personal and intellectual identity, but in receiving credit, social status, a higher income, and an exemption from the necessity of further study or intellectual development * * *. The present system of lectures, text books, survey courses, standard requirements of subject matter, examinations, and numerical grades * * * fails to touch the inner consciousness of the student or to deal with his motivations, his emotions, his aims, and his needs.[17]

Whether the crisis of numbers has in and of itself made the difference and whether the new movements on the educational scene will eventually really "touch the inner consciousness of the student" are still other questions. Be that as it may, a number of institutions have already begun something of the kind of program scrapping that Dr. Taylor suggests. Prominent among these are the new college plans already under way at Michigan State's Oakland College, Wayne State's

[17] Harold D. Taylor, "The World of the American Student," *Current Issues in Higher Education*, Washington, National Education Association, 1956, pp. 22, 23, 24.

Monteith College, Dartmouth, Bard, Goddard, and Austin Colleges, and Wesleyan University, and the new college programs that have been proposed by Hofstra College and by the officials of Amherst, Smith, and Mount Holyoke Colleges, and the University of Massachusetts. While each of these programs has as its foremost concern the improvement of the quality of the student's educational experience, it also holds import for (and in several instances finds its impetus in) the problem of serving increasing numbers in higher education. In the five programs reviewed in this report, the material is based on original prospectuses outlining the plans of these new college programs. While there have since been some modifications in the prospectuses, the data are considered to be illustrative of the broad outlines and purposes of these programs.

Monteith College at Wayne State University entered its first class in the fall of 1959. The program at Monteith departs from the more usual organization of the college curriculum in the distribution of its general education requirements over the student's 4 years in college, in the provision for a degree in general education for those students who do not wish to major in a specific field, and in its use of independent study procedures early in the student's career.

Under its plan of general education, students will be expected to take work in the natural sciences, the social sciences, and the humanities during their junior and senior years as well as in their first 2 years. The program is built around a series of 4 basic courses extending over several semesters and culminating in a year-long Senior Colloquium. It would require of all students a common core of experiences so organized as to provide a broad interdisciplinary approach to both general and field education and an exposure to a wide variety of disciplines. The offering of an undergraduate degree in general education represents one of the first such degrees in this country.

Monteith hopes to employ a variety of means for developing student independence in learning. For example, the student will be asked to take the terminal segment of one of his first three basic courses without attending the meetings of discussion groups of the course. While he will be admitted to lectures, given a syllabus, and have access to occasional advice, he will be asked to "develop his own capacities for intellectual initiative and independent work by completing the course without the help which attendance at the meeting of a small section would have given him." [18] It is expected that each student will choose for himself which of the courses he wishes to

[18] "An Experimental College at Wayne State University," Detroit, Michigan, Wayne State University, 1958, p. 11.

terminate in this fashion. After he has successfully handled a segment of his course work in this way, he will no longer be required to attend class meetings of any of his elective courses, though such meetings will remain open to him.

Still another independent study device appears in Monteith's plans for its year-long Senior Colloquium, the last of the required basic courses. The colloquium will be offered in two sections each semester. Classes will meet but once in 2 weeks. A student will enroll in both sections in each semester of his final year, but will attend the meetings of only one of these sections. Tape recordings of the meetings of the other section will be available to him if he wishes to use them. At the end of the semester, the student will be examined equally on the work of the two sections. This pattern will be continued for the second half of the Senior Colloquium, so that in effect the student will be expected to cover one-half of his required work in his senior year with no formalized instruction. While he may, of course, seek conferences with any member of the staff and thus secure additional help, he will not be allowed to "convert such occasional conferences into private systematic tutorial instruction." [19]

Through its curricular stress on broad interdisciplinary approach to general education, Monteith hopes that certain "core experiences" and the development of independence in learning will enable students to achieve a new level of quality in the educational program. It hopes further that its careful organization of the program, with its planned use of lectures, student-led seminars, and independent study, will enable it to make far more efficient use of its instructional staff and facilities than might usually be the case.

Goddard College centers much of its revised curriculum around the use of independent study, individual research projects, and student field experiences. The student attends regular classes during his first year and moves toward an increasing degree of independent work in his later years.

Nine areas of study have been defined as central to the student's general education. These areas include study and field work in human relations, social psychology and anthropology, languages and culture, the physical sciences and mathematics, the biological sciences, the arts, education and the community, American society, and the English language. The student takes three courses each semester of his first year. These courses are planned around large areas rather than narrow subject matters, with the program organized so that the student devotes a full day to the work of a particular course. In his

[19] *Ibid.*, p. 29.

629896 O–62–3

last term, the student takes no courses. Between these beginning and end points, students plan with their advisors flexible programs which permit a wide variety of course work, participation in off-campus jobs, and independent study.

As part of its program, the college plans to establish a learning aids center "to extend the traditional functions of the library as a place for individual learning and make possible the study of many subject matters with little teacher assistance." [20] The center is planned to include teaching machines, a file of learning resources such as chemistry and physics courses on film, documentary materials in the physical and social sciences, language records and tapes, slides of art works, recordings of poetry and drama, and taped lecture material, along with facilities for self-operable films, slides, and recording equipment. Students will work at the learning aids center either on their own or in groups.

Under its new program the college will operate 12 months of the year with students permitted to use their 2-month winter work period and their 2-month summer vacation period in ways which will enable them to enrich and accelerate their programs at the college. For example, a student might complete a research study during his nonresidence work term experience and thus extend his fall semester by 2 months, while still another student might take advantage of the July–August vacation period to earn academic credit for a project in the college's community service work camp program. The college expects, as faculty and students learn to take advantage of the flexibility of the new calendar, "that perhaps one-fifth of the students enrolled will be absent from the college all of the time and that a fifth might be continuing work at the college during what is now the summer vacation and the winter nonresident term." [21] It is hoped that under these conditions the college would be able to enroll nearly 20 percent more students than is now the case, with no increase in facilities.

Bard College, in the search for quality and better utilization in its experimentation, uses a newly organized winter session curriculum, a new plan of nonresident credit for independent study, and employment of a year-round calendar that will permit some students to complete their programs in 3 years. Under its new plan, Bard will add 2 half semesters of 7 weeks each to its present 2-semester system of 15 weeks each. One of these half semesters will run concurrently with Bard's Winter Field Period, from early January to late February; the other will be a summer session running from mid-July to early September.

[20] "An Experiment in College Curriculum Organization at Goddard College," Plainfield, Vermont, Goddard College, 1959, p. 7.
[21] *Ibid.*, p. 6.

Bard sees the short sessions of its new program as offering an opportunity for radically new teaching experiments. It expects that, as these programs develop, they will have "a profound effect on Bard's total educational program." [22]

The midwinter course offerings are to be organized around a single theme which will be approached intensively from a variety of disciplines. The first subject chosen for study is "The Breakdown of the 19th Century World View," which will be studied from the disciplines of biology, physics, religion and philosophy, economics, literature, and the arts. The College hopes to develop still other central offerings designed to "stimulate the development of interdisciplinary work and carry Bard further toward the goal of a unified and concerned community." [23] While several such offerings might be available during any one midwinter session, students would be permitted to enroll in only *one* at a time. Each course would carry 3 academic credits, with students meeting in three 2-hour seminar sessions each week. In addition, all faculty members participating in the course would take part in one general seminar session each week.

The summer session will at first offer a group of more or less conventional courses with the twofold purpose of serving as a basis for comparison with the midwinter session and enabling the college to attract students from other institutions. Later, these summer session offerings may take on the format of the midwinter program.

Through a new program of nonresident credit for independent study, Bard hopes that it may help students to develop more effective habits for learning independently. It is expected that the independent study programs may be of several sorts. They may involve an individual research project, a special assignment that follows on the heels of a first semester course or is sandwiched between the two semesters of a specially designed year course, a work experience which is combined with a project, or "a special work experience evaluated in advance as possessing special academic merit." [24]

Under the new calendar Bard's academic plant will be in operation for a total of 44 weeks, as compared with its former use of a 30- to 32-week school year. The plan is highly flexible and will allow students to complete their work in a regular 4-year sequence or to accelerate to 3 years through the use of independent study and attendance in the abbreviated winter and summer sessions.

---

[22] "Release on Bard College Program," Annandale-on-Hudson, Bard College, July 1959, p. 4.

[23] *Ibid.*, p. 4.

[24] W. Boyd Alexander and Alonzo A. Myers, "Evaluation of an Experiment in Off-Campus Independent Study at Bard College," Annandale-Hudson, Bard College, May 1959, p. 12.

Wesleyan University thinks it may have found a way of staying small while getting larger. Its program for improving quality and handling larger numbers takes quite a different turn from some of the other new college plans in that it builds on an expansion of personnel and facilities. It expects that its new plan would enable the college to increase enrollment by as much as 40 to 50 percent in the next decade.

Under its plan Wesleyan proposes to establish a federation of small colleges within the framework of the university, each with its own faculty, student body, and course offerings. The colleges would range in size from 100 to 250 students, with faculties of about 10 to 20, or one teacher to every 10 or 12 students. Each college would be organized around a particular area of knowledge with its faculty chosen to represent as many different disciplines as possible. Each would have its own director and governing committees and would administer its own educational unit. There would be a College of History, Philosophy, and Comparative Literature; a College of Creative Arts; a College of Behavioral Sciences; a College of Physical Sciences; and other colleges centering on broad programs in various areas of concentration. In addition to these separate colleges organized around different fields of concentration, the proposal also envisions a more general University College, which might function as a service unit to the other colleges, with offerings in such areas as philosophy, religion, mathematics, foreign languages, and English.

During his first year, the student would take much of his work in the University College but would also draw on courses in the other colleges. His field program would begin with his second year, when he would move into one of the separate college units. From his second to his senior year, the student would take courses and do independent work in his area of concentration as well as in an area of supplementary studies and general education. The bulk of this work would occur within his own college, although he would be encouraged to draw on the offerings of other colleges in pursuance of his overall goals in general education. Much emphasis would be placed on the use of small group and tutorial approaches to learning. Each student would work closely with a tutorial committee, with most classes and seminars arranged so that all members of the student's tutorial committee would have taught most or all students in a particular program over a substantial period of time. The student would have one member of the tutorial committee as his regular tutor, but all members of the committee would have an opportunity to work with the student during the course of his college years.[25]

[25] A Report of the Subcommittee of the Educational Policy Committee of the Faculty, "The College Plan," Middletown, Conn., Wesleyan University, Dec. 1958, p. 2.

The New College Plan sponsors think that their proposal will make it possible to provide "education of the highest quality . . . with a faculty half as large, in proportion to the student body, as is now customary in institutions of the first rank." [26] The plan proposes the creation of a new type of college to be jointly sponsored by the colleges of Amherst, Smith, Mount Holyoke, and the University of Massachusetts. As a cooperative enterprise it represents still another direction in the search for more effective as well as more efficient ways of learning.

The proposal of this 4-college group states:

> The New College Plan is based on the conviction that the average student entering one of the better colleges is capable of far more independence than he now demonstrates * * *. It will be a major goal of the college to develop and sustain a style of life which will make it habitual for students to work together in groups and individually without constant recourse to the faculty.[27]

The sponsors of the New College Plan propose to organize the curriculum to train students to educate themselves and to develop in the students a capacity to continue their education throughout their lives. The freshman program is to be organized around specially designed seminars in which the student will be expected to gain experience in independent work; and, over the student's 4 years, student-led seminars, discussion groups, and other devices will be used in an attempt to help students develop skills in working independently.

The New College plans to limit its course offerings to a total of only 50 courses each semester. While these offerings will be supplemented through the collateral use of course offerings of each of the sponsoring institutions, the New College expects students "to master subjects chiefly on their own initiative * * *. Completeness will not depend on the course offerings, but on the student, since he is made responsible, as he matures, for organizing his study so as to master [his] subjects." [28]

The student will have a three-course program instead of the customary five or four, and faculty members will give only one lecture course at a time, with the time saved from course work to be used by faculty and students for the development of independent projects. The freshman level seminars (averaging about 12 students each) will be designed to bring the student into close contact with the work of scholars and to provide him with an intensive but limited exploration of a single subject matter area. It is expected that the student will quickly gain experience in working independently because a signifi-

[26] C. L. Barber, Donald Sheehan, Stuart M. Stoke, Shannon McCune, *The New College Plan: A Proposal for a Major Departure in Higher Education*, Amherst, Mass., University of Massachusetts, 1958, p. 7.

[27] *Ibid.*, p. 9.

[28] *The New College Plan, op. cit.*, p. 12.

cant portion of the seminar work will be planned around independent projects "for which the freshman will have or can acquire the necessary frame of reference, and in which he will encounter fundamental problems of the topic and the discipline." [29]

In the main, upper-class courses are to be organized as lecture courses (often averaging only one or two meetings per week) and supplemented by seminar work, sometimes directed by the lecturer, but usually under student leadership. It is hoped that these adjunctive seminars, along with the student's freshman seminar experiences, will accustom the student to a new style of life in which independent work will be normal and expected.

The calendar of the New College Plan would be organized on a three-term basis, consisting of fall and spring terms of 14 weeks each, and a specially planned midwinter term of a month at which time all students would join in studying two courses designed to provide common intellectual experience. One of these courses would deal with a major aspect of Western culture, the other with study of a non-Western culture, with the subjects changing from year to year, so that a wide variety of subjects would be covered over a 4-year span. The emphasis on independent work would continue during this period. All regular courses and projects would give way during this midwinter term while the college "turns itself into a conference * * * as it joins in a common intellectual enterprise." [30]

By giving up the attempt at a complete course offering and using the specialized courses of the sponsoring institutions, the authors of the New College Plan hope to achieve "significant economies in dollars and, more important, in the number of teachers required." [31] They estimate that under this plan it will be possible for a faculty of 50 to give a first-rate education to 1,000 students. In addition, the New College Plan hopes to achieve still other economies in making use, where it can, of library, recreational, and specialized scientific facilities already existing among the four institutions.

New college programs, such as those described in this report, reflect a variety of new directions: increased emphasis on independent study; greater use of field and off-campus experiences; emphasis on general education; use of freshman seminars, tutorials, and other small-group approaches to learning; emphasis on the more intensive exploration of certain subject-matter areas; reduction of the number of courses a student takes at any one time; use of common or core learning experiences for sections of the student body, and in some cases the entire

[29] *Ibid.*, p. 18.
[30] *Ibid.*, p. 24.
[31] *Ibid.*, p. 4.

student body; increased use of learning aids such as films, tape recordings, and other audiovisual devices; cooperative use of facilities; and use of summer sessions and special winter terms to enrich as well as accelerate the student's educational experience.

It is much too early, of course, to attempt to surmise what will happen with these new college plans. The programs at Monteith, Goddard, Bard, and Wesleyan are just underway, having entered their first freshman classes in the 1959–1960 school year, and the New College Plan of the Amherst, Smith, Mt. Holyoke, and University of Massachusetts group is still in the study stages. Some mistakes will no doubt be made. What is significant about these movements, however, is that higher education is "on the dare"—and has really begun to shake itself loose from what Dr. Taylor and others suggest have been too long established and too deeply ingrained patterns of behavior.

IV. Conclusion

The preceding material barely touches on the new developments presently under way in higher education. There are, of course, some dangers in these new movements; for it is possible that much that is educationally worthless, if not harmful, could pass under the guise of experimentation. While few would argue for experimentation for experimentation's sake, the fact of the matter is that we have too often tended to rationalize away the possibilities of, and the need for, taking a closer look at the nature and organization of our learning processes.

The rationale for the present experimentation with the new programs of independent study and with the new college programs lies in several bases: in the college's desire to find new ways of learning and to improve the quality of the student's educational experience; in the desire to reduce the "detail burden" of the instructor and provide new avenues for his own research and development as a teacher; and in the "press of numbers." Certainly much of the impetus for the experimentation now going on grows out of the present emphasis on the more effective utilization of teaching resources. It would be a mistake, however, to view this goal as the sole objective of these experiments, and it would be a mistake to assume that certain kinds of economies in the organization of our teaching and learning procedures will necessarily be harmful to the achievement of quality. There is, in fact, some evidence to suggest that, rather than representing mutually contradictory goals, these objectives may well go hand in hand.

There is much evaluation that needs to accompany the present experimentation. There will be some "backing up" and some reworking of designs and ideas. The newer developments, however, hold within

them a great deal of excitement and potential for higher education, for they carry with them the bold challenge of discovery of new and perhaps more effective ways of learning.

What may have appeared to be higher education's crisis may yet turn out to be its best opportunity.

U.S. GOVERNMENT PRINTING OFFICE : 1966 O—212-759